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10/043,478	01/10/2002	Christopher J. Frantz	COMP:0278 P01-4017	6440

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EXAMINER

VITAL, PIERRE M

ART UNIT	PAPER NUMBER
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2188

DATE MAILED: 12/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/043,478

Applicant(s)

FRANTZ ET AL.

Examiner

Pierre M. Vital

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-17 is/are allowed.
- 6) ☒ Claim(s) 1-9 and 18-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This office Action is in response to applicant's communication filed September 24, 2004 in response to PTO Office Action mailed June 23, 2004. The Applicant's remarks and amendments to the claims and/or the specification were considered with the results that follow.
2. Claims 1-24 have been presented for examination in this application. In response to the last Office Action, claims 1 and 10 have been amended. No claims have been canceled or added. As a result, claims 1-24 are now pending in this application.

Response to Arguments

3. Applicant's arguments, see pages 8 and 11, filed September 24, 2004, with respect to claims 1-9 have been fully considered and are persuasive. The rejection of claims 1-9 has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Braithwaite (6,104,561) and Soga et al (5,610,893).
4. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

5. Applicant's arguments filed September 24, 2004 with respect to claims 18-24 have been fully considered but they are not persuasive. As to the remarks, applicant asserted that the Braithwaite et al. and MacLeod references, taken alone or in combination, absolutely fail to mention or suggest "reading data from a location and writing the same data back to the same location".

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., writing the same data back to the same location) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Examiner would like to point out that claim 18 as presented provides for reading data from a storage location of a diskette and writing the data back to the diskette. Nowhere does the claim specify that the data be written back to the same location on the diskette. Applicant would be advised to amend the claim to more clearly point out the subject matter which applicant sees as his invention.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Braithwaite et al (US6,104,561) and Soga et al (US5,610,893).

As per claim 1, Braithwaite discloses a method of automatically identifying a write protect status of a computer diskette, comprising the acts of: interacting with the computer diskette to produce a failure code indicative of the write protect status [*the invention is primarily intended for use in a conventional floppy disk drive or other floppy disk drive that receives removable cartridges; col. 2, lines 35-40; a first location stores a code indicative of a protection mode of the storage medium; col. 2, lines 44-46*]; and identifying a write protect status of the computer diskette based on the failure code [*the disk drive reports an error whenever access to the storage medium is inhibited by the protection mode; col. 2, lines 58-61*].

However, Braithwaite does not specifically teach that the failure code indicative a position of a write protect mechanism disposed on the computer diskette as recited in the claim.

Soga discloses an information recording and reproducing apparatus using a position of a write-protection sliding switch to perform an error handling process capable of preventing erroneous operation during a copying process thereby protecting the information recorded on a medium (col. 2, lines 16-20; col. 7, line 29 – col. 8, lines 32).

Since the technology for implementing a failure code indicative a position of a write protect mechanism disposed on a computer diskette was well known as evidenced by Soga, an artisan would have been motivated to implement this feature in the system of Braithwaite. Thus, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the system of Braithwaite to include a failure code indicative a position of a write protect mechanism disposed on the computer diskette because it was well known to prevent erroneous operation during a copying process thereby protecting the information recorded on a medium (col. 2, lines 16-20) as taught by Soga.

8. Claims 1, 3, 4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wambach et al (U56,330,648) and Soga et al (US5,610,893) and Braithwaite et al (US6,104,561).

As per claim 1, Wambach discloses a method of automatically identifying a write protect status of a computer removable media disk drive, comprising the acts of: interacting with the computer removable media disk drive to produce a failure code indicative of the write protect status [*value of protected sector bit is sensed before permitting writing to that sector; col. 2, lines 4-6; specified address is compared with list of protected memory locations for each write request; col. 4, lines 23-27*]; and identifying the write protect status of the computer removable media disk drive based on the failure code [*flag value of "1" by the*

write protection code implemented as programmed microprocessor with its program stored to prevent writing to that sector, col. 2, lines 6-12, 40-45; if a match is found, write operation is aborted; col. 4, lines 27-36; also see abstract].

However, Wambach does not specifically teach that the removable media disk drive is a diskette (i.e., floppy disk) and that the failure code indicative a position of a write protect mechanism disposed on the computer diskette as recited in the claim.

Soga discloses an information recording and reproducing apparatus, wherein floppy disks can be used (col. 3, lines 57-60), using a position of a write-protection sliding switch to perform an error handling process capable of preventing erroneous operation during a copying process thereby protecting the information recorded on a medium (col. 2, lines 16-20; col. 7, line 29 – col. 8, lines 32). Since the technology for implementing a failure code indicative a position of a write protect mechanism disposed on a computer diskette was well known as evidenced by Soga, an artisan would have been motivated to implement this feature in the system of Braithwaite. Thus, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the system of Braithwaite to include a failure code indicative a position of a write protect mechanism disposed on the computer diskette because it was well known to prevent erroneous operation during a copying process thereby protecting the information recorded on a medium (col. 2, lines 16-20) as taught by Soga.

Braithwaite discloses a write protecting scheme using a floppy disk that can provide flexibility because the disk can interface with a host computer and can be

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employed as a stand-alone unit, or alternatively, can be installed in an internal bay of the host computer (col. 2, lines 35-41; col. 4, lines 25-28). Since the technology for implementing a floppy disk in a write protecting scheme was well known and since the floppy disk can provide flexibility because the disk can interface with a host computer and can be employed as a stand-alone unit, or alternatively, can be installed in an internal bay of the host computer, an artisan would have been motivated to implement a floppy disk in the system of Wambach. Thus, it would have been obvious to one of ordinary skill in the art, at the time of the invention to use a floppy disk in the system of Wambach because it was well known to provide flexibility because the disk can interface with a host computer and can be employed as a stand-alone unit, or alternatively, can be installed in an internal bay of the host computer as taught by Braithwaite.

As per claim 3, Wambach discloses the act of interacting with the computer diskette comprises the act of interacting with a non-storage area of the computer diskette [*write protection circuit code implemented as programmed microprocessor with its program stored to respond to a request to write to a protected mass memory location*; col. 2, lines 41-43; abstract].

As per claim 4, Wambach discloses the act of interacting with the non-storage area comprises the act of attempting to write data to the non-storage area [*request to write to a protected mass memory location*; col. 2, lines 41-43].

As per claim 6, Wambach discloses the act of interacting with the computer

diskette to produce the failure code comprises the act of generating a write protect failure code if the write protect status of the computer diskette is write protected [*an illegal command is sent to the mass memory and an error signal (or illegal command) is issued back to the computer in response to a write to a protected mass memory location*; col. 2, lines 41-45].

As per claim 7, Wambach discloses the acts of interacting with the computer diskette and identifying the write protect status are performed upon receipt of an access request to the computer diskette [*a request to write to a protected mass memory location causes an illegal command to be sent to the mass memory and an error signal issued back to the computer*; col. 2, lines 41-45].

As per claim 8, Wambach discloses the act of receiving the access request from a remote computer [*interface card 110 installed between computer and mass memory is at a remote location*; Fig. 2; col. 2, lines 36-40].

9. Claims 2, 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wambach et al (US6,330,648) and Braithwaite et al (US6,104,561) and MacLeod (US6,598,135).

As per claim 2, the combination of Wambach and Braithwaite discloses the claimed invention as detailed above in the previous paragraphs. However, Wambach and Braithwaite do not specifically teach the act of identifying a media type and storage area of the computer diskette as recited in the claim.

MacLeod discloses the act of identifying a media type and storage area of a computer diskette [*the drive reads the media type and the sector written flag (SWF)*; col. 6, lines 44-65].

It would have been obvious to one of ordinary skill in the art, having the teachings of Wambach and Braithwaite and MacLeod before him at the time the invention was made, to modify the system of Wambach and Braithwaite to include the act of identifying a media type and storage area of a computer diskette because it was well known to provide a reliable method of protecting data by generating an error message and no further processing will be allowed until a valid media type is placed in the drive [col. 2, lines 9-10; col. 6, lines 51-54] as taught by MacLeod.

As per claim 5, the combination of Wambach and Braithwaite discloses the claimed invention as detailed above in the previous paragraphs. However, Wambach and Braithwaite do not specifically teach the act of interacting with the computer diskette comprises the acts of reading data from a storage location of the computer diskette; and attempting to write the data back to the computer diskette as recited in the claim.

MacLeod discloses the act of interacting with a computer diskette comprises the acts of reading data from a storage location of the computer diskette [*data to a sector can be read many times*; col. 2, lines 26-28]; and attempting to write the data back to the computer diskette [*the sector is write protected if Write Protect Flag and Sector Written Flag match, an error code is returned to the Host*; col. 7, lines 7-13].

It would have been obvious to one of ordinary skill in the art, having the teachings of Wambach and Braithwaite and MacLeod before him at the time the invention was made, to modify the system of Wambach and Braithwaite to include the act of interacting with a computer diskette comprises the acts of reading data from a storage location of the computer diskette; and attempting to write the data back to the computer diskette because it was well known to provide a lower level of write protection by allowing the storage and retrieval of data to/from the diskette in a manner consistent with the standard for DVD-RAM [col. 3, lines 5-6, 38-40] as taught by MacLeod.

As per claim 9, the combination of Wambach and Braithwaite discloses the claimed invention as detailed above in the previous paragraphs. However, Wambach and Braithwaite do not specifically teach the acts of interacting with the computer diskette and identifying the write protect status are performed automatically upon insertion of the computer diskette into a disk drive as recited in the claim.

MacLeod discloses the acts of interacting with a computer diskette and identifying a write protect status are performed automatically upon insertion of the computer diskette into a disk drive [*a method of write protection is illustrated which starts upon insertion of the optical disk in the drive, where the drive reads the physical format information, Figs. 3A, 3B; col. 6, lines 44-65*].

It would have been obvious to one of ordinary skill in the art, having the teachings of Wambach and Braithwaite and MacLeod before him at the time the invention was made, to modify the system of Wambach and Braithwaite to include the

acts of interacting with a computer diskette and identifying a write protect status are performed automatically upon insertion of the computer diskette into a disk drive because it was well known to provide a reliable method of protecting data by generating an error message and no further processing will be allowed until a valid media type is placed in the drive [col. 2, lines 9-10; col. 6, lines 51-54] as taught by MacLeod.

10. Claims 18, 19 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacLeod (US6,598,135) and Braithwaite et al (US6,104,561).

As per claim 18, MacLeod discloses a method of identifying a write protect status of a rewriteable data storage media, comprising the acts of reading data from the rewriteable data storage media at a storage location [*data to a sector can be read many times*; col. 2, lines 26-28]; attempting to write the data back to the rewriteable data storage media [*overwrite of a previously written sector is prevented*; col. 6, lines 14-23]; and identifying the write protect status of the rewriteable data storage media as write protected if a write protect error code is observed [*the sector is write protected if Write Protect Flag and Sector Written Flag match, an error code is returned to the Host*; col. 7, lines 7-13].

However, MacLeod does not specifically teach that the removable media disk drive is a diskette (i.e., floppy disk) as recited in the claim.

Braithwaite discloses a write protecting scheme using a floppy disk that can provide flexibility because the disk can interface with a host computer and can be employed as a stand-alone unit, or alternatively, can be installed in an internal bay of the host computer (col. 2, lines 35-41; col. 4, lines 25-28). Since the technology for implementing a floppy disk in a write protecting scheme was well known and since the floppy disk can provide flexibility because the disk can interface with a host computer and can be employed as a stand-alone unit, or alternatively, can be installed in an internal bay of the host computer, an artisan would have been motivated to implement a floppy disk in the system of MacLeod. Thus, it would have been obvious to one of ordinary skill in the art, at the time of the invention to use a floppy disk in the system of MacLeod because it was well known to provide flexibility because the disk can interface with a host computer and can be employed as a stand-alone unit, or alternatively, can be installed in an internal bay of the host computer as taught by Braithwaite.

As per claim 19, MacLeod discloses the acts of reading data, attempting to write the data, and identifying the write protect status are initiated automatically upon insertion of the removable media into a media drive [*a method of write protection is illustrated which starts upon insertion of the optical disk in the drive, where the drive reads the physical format information, Figs. 3A, 3B; col. 6, lines 44-65*].

As per claim 22, MacLeod discloses the act of attempting to write the data causes the write protect failure code if the removable media is write protected [*if the sector is write-protected, an error code is returned; col. 7, lines 9-13*].

As per claim 23, MacLeod discloses the act of attempting to write the data succeeds if the removable media is not write-protected [*if the Write Protect Flag is not set, the sector is empty, write operations to the sector shall be allowed*; col. 7, lines 14-16].

As per claim 24, MacLeod discloses the act of attempting to write the data comprises the act of attempting to rewrite the data over the data existing at the storage location [*overwriting of a previously written sector*; col. 6, lines 14].

11. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacLeod (US6,598,135) and Braithwaite et al (US6,104,561) and Wambach et al (US6,330,648).

As per claim 20 and 21, the combination of MacLeod and Braithwaite discloses the claimed invention as detailed above in the previous paragraphs. However, MacLeod and Braithwaite do not specifically teach the acts of reading data, attempting to write the data, and identifying the write protect status are initiated by a remote computer; and processing an access request from the remote computer for access to the removable media as recited in the claims.

Wambach discloses the acts of reading data, attempting to write the data, and identifying the write protect status are initiated by a remote computer [*interface card 110 installed between computer and mass memory is at a remote location*; Fig. 2; col. 2, lines 36-40]; and processing an access request from the remote computer for access to the

removable media [*write protection circuit responds to a request to write to a protected mass memory location*; col. 2, lines 41-43].

It would have been obvious to one of ordinary skill in the art, having the teachings of MacLeod and Braithwaite and Wambach before him at the time the invention was made, to modify the system of MacLeod and Braithwaite to include the acts of reading data, attempting to write the data, and identifying the write protect status are initiated by a remote computer; and processing an access request from the remote computer for access to a removable media because it was well known to provide a computer which is impervious to unauthorized or accidental overwriting of key sectors by providing a computer not susceptible to tampering by a computer virus stored in the mass memory [col. 1, lines 32-38] as taught by Wambach.

Allowable Subject Matter

12. Claims 10-17 are allowed.
13. The following is a statement of reasons for the indication of allowable subject matter:

As per claim 10, the prior art of record does not teach or suggest "seeking to a location beyond storage tracks and sectors of a storage area of a floppy disk, wherein data cannot be stored at the location; attempting to write data to the floppy disk at the location; evaluating a failure code produced by the attempted write; and identifying the write protect status of the floppy disk based on the failure code" in combination with the other elements set forth in the claimed invention.

Therefore, claims 11-17 are allowable as being dependent upon claim 10 and having additional allowable features therein.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111 (c) to consider these references fully when responding to this action. The documents cited therein teach producing a failure code indicative of a write protect mechanism disposed on a diskette or floppy disk in a removable media disk drive.

15. The examiner requests, in response to this Office action, any reference(s) known to qualify as prior art under 35 U.S.C. sections 102 or 103 with respect to the invention as defined by the independent and dependent claims. That is, any prior art (including any products for sale) similar to the claimed invention that could reasonably be used in a 102 or 103 rejection. This request does not require applicant to perform a search. This request is not intended to interfere with or go beyond that required under 37 C.F.R. 1.56 or 1.105.

The request may be fulfilled by asking the attorney(s) of record handling prosecution and the inventors)/assignee for references qualifying as prior art. A simple statement that the query has been made and no prior art found is sufficient to fulfill the request. Otherwise, the fee and certification requirements of 37 CFR section 1.97 are waived for those documents submitted in reply to this request. This waiver extends only

to those documents within the scope of this request that are included in the application's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this request and any information disclosures beyond the scope of this are subject to the fee and certification requirements of 37 CFR section 1.97.

In the event prior art documentation is submitted, a discussion of relevant passages, figs., etc., with respect to the claims is requested. The examiner is looking for specific references to 102/103 prior art that identify independent and dependent claim limitations. Since applicant is most knowledgeable of the present invention and submitted art, his/her discussion of the reference(s) with respect to the instant claims is essential. **A response to this inquiry is greatly appreciated.**

16. The examiner also requests, in response to this Office action, support be shown for language added to any original claims on amendment and any new claims. That is, indicate support for newly added claim language by specifically pointing to page(s) and line no(s) in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application.

17. When responding to this office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

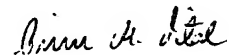
19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre M. Vital whose telephone number is (571) 272-4215. The examiner can normally be reached on 8:30 am - 6:00 pm, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on (571) 272-4210. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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December 3, 2004



Pierre M. Vital
Primary Examiner
Art Unit 2188